

VALUE	COMMAND TYPE
0-7	Reserved for command types
8	NOT IMPLEMENTED
9	ACCEPTED
A ₁₆	REJECTED
B ₁₆	IN TRANSITION
C ₁₆	IMPLEMENTED/STABLE
D ₁₆	CHANGED
E ₁₆	Reserved for future specification
F ₁₆	INTERIM

Table II: AV/C Response Types

As illustrated in Table I above, a value of 0000 within the ctype data field indicates a control command type. A control command is sent by a controller to a target device to instruct the target device to perform an operation. Either the AV unit or a subunit at the target device may be the recipient of the command, as determined by the subunit_type and subunit_ID fields in the command frame. The remaining fields, opcode and operand[n], specify the command. A target device that receives a control command shall return an AV/C response frame with one of the following four response codes: not implemented, accepted, rejected and interim. The not implemented response code is returned by the target device if the target device does not support the control command specified by the opcode and operand[n] field values, or if the command is addressed to a subunit not implemented by the target device. The accepted response code is returned if the target device implements the control command specified by the opcode and operand[n] values and the target state permits execution of the command. The rejected response code is returned if the target device implements the control command specified by the opcode and operand[n] values, but the

target state does not permit execution of the command. The interim response code is returned if the target device implements the control command specified by the opcode and operand[n] values, but the target device is unable to respond with either an accepted or rejected response within 100 milliseconds. Unless a subsequent bus reset causes the AV/C transaction to be aborted, after sending an interim response the target device shall ultimately return a response frame with either an accepted or rejected response.

As illustrated in Table I, a value of 0001 within the ctype data field indicates a status command type. A status command is sent by a controller to a target device to instruct the target device to request the target device's current status. Status commands may be sent to either AV units or subunits. A target device that receives a status command shall return an AV/C response frame with one of the following four response codes: not implemented, rejected, in transition and stable. The not implemented response code is returned by the target device if the target device does not support the status command specified by the opcode and operand[n] field values, or the command is addressed to a subunit not implemented by the target device. The rejected response code is returned if the target device implements the status command specified by the opcode and operand[n] values, but the target state does not permit the return of status for the command. The in transition response code is returned by the target device if the target device implements the status command specified by the opcode and operand[n] values, but the target state is in transition, possibly because of an already acknowledged command or a manual operation. A subsequent status command, at an unspecified future time, may result in the return of a stable response code. The stable response code is returned by the target device if the target device implements the status command specified by the opcode and operand[n] values and the information requested is reported in the opcode and operand[n] values in the AV/C response frame.

As illustrated in Table I, a value of 0010 within the ctype data field indicates a specific inquiry command type. Inquiry commands may be used by a controller to determine whether or not a target device supports a particular control command. Except for the value within the ctype data field, the AV/C command frame for an inquiry command is identical to

the corresponding control command. A controller may reliably use inquiry commands to probe the capabilities of a target device, since the target device shall not modify any state nor initiate any command execution in response to an inquiry command. A target device that receives an inquiry command shall return an AV/C response frame with only one of the following two response codes: implemented or not implemented. All other fields in the response frame are exact copies of the command frame. A response of implemented specifies that the corresponding control command specified by the opcode and operand[n] values is implemented by the target device. An AV device implementation may validate all of the operands or it may validate only the opcode and enough of the operands to uniquely identify the control command and determine its support level. A response of not implemented specifies that the corresponding control command specified by the opcode and operand[n] values is not implemented by the target device.

As illustrated in Table I, a value of 0011 within the ctype data field indicates a notify command type. A controller that desires to receive notification of future changes in a target device's state may use the notify command. Responses to a notify command shall indicate the current state of the target device and then, at some indeterminate time in the future, indicate the changed state of the target device. A target device that receives a notify command shall not modify its state but shall generate an immediate response frame with one of the following three response codes: not implemented, rejected and interim. The not implemented response code is returned by the target device if the target device does not support the control command specified by the opcode and operand[n] field values, or the command is addressed to a subunit not implemented by the target device. The rejected response code is returned if the target device implements the event notification for the condition specified by the opcode and operand[n] values, but the target device is not able to supply the requested information. The interim response code is returned if the target device supports the requested event notification and has accepted the notify command for any future change of state. The current state is indicated by the opcode and operand[n] values returned in the response frame. At some future time, the target device shall return an AV/C response